

CLAIMS LISTING

- 1.(currently amended) A stimuable phosphor screen comprising
- a radiation-transparent substrate;
 - a stimuable phosphor layer formed on said substrate;
 - a first transparent organic film covering said stimuable phosphor layer; and
 - a second transparent film formed on said first transparent organic film,
- characterized in that said second transparent film is a polymeric film containing polymers selected from the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers.
- 2.(original) A stimuable phosphor screen according to claim 1, further comprising an intermediate transparent organic film between said substrate and said stimuable phosphor layer.
- 3.(original) A stimuable phosphor screen according to claim 1, wherein said organic film is a poly-paraxylylene film.

4.(currently amended) A stimuable phosphor screen according to claim 2, wherein at least one of said intermediate transparent organic film and said first transparent organic film is a poly-paraxylylene film.

5.(original) A stimuable phoshor screen according to claim 1, wherein said substrate is an aluminum or an amorphous carbon (a-C) substrate.

6.(original) A stimuable phoshor screen according to claim 2, wherein said substrate is an aluminum or an amorphous carbon (a-C) substrate.

7.(original) A stimuable phoshor screen according to claim 3, wherein said substrate is an aluminum or an amorphous carbon (a-C) substrate.

8.(original) A stimuable phoshor screen according to claim 4, wherein said substrate is an aluminum or an amorphous carbon (a-C) substrate.

9.(original) A stimuable phoshor screen according to claim 1, wherein said storage phosphor is a binderless needle-shaped, vapor-deposited CsBr:Eu phosphor.

- 10.(original) A stimuable phoshor screen according to claim 2,
wherein said storage phosphor is a binderless needle-shaped,
vapor-deposited CsBr:Eu phosphor.
- 11.(original) A stimuable phoshor screen according to claim 3,
wherein said storage phosphor is a binderless needle-shaped,
vapor-deposited CsBr:Eu phosphor.
- 12.(original) A stimuable phoshor screen according to claim 4,
wherein said storage phosphor is a binderless needle-shaped,
vapor-deposited CsBr:Eu phosphor.
- 13.(original) A stimuable phoshor screen according to claim 5,
wherein said storage phosphor is a binderless needle-shaped,
vapor-deposited CsBr:Eu phosphor.
- 14.(original) A stimuable phoshor screen according to claim 6,
wherein said storage phosphor is a binderless needle-shaped,
vapor-deposited CsBr:Eu phosphor.
- 15.(original) A stimuable phoshor screen according to claim 7,
wherein said storage phosphor is a binderless needle-shaped,
vapor-deposited CsBr:Eu phosphor.

16.(original) A stimuable phoshor screen according to claim 8, wherein said storage phosphor is a binderless needle-shaped, vapor-deposited CsBr:Eu phosphor.

17.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 9, and an imaging device disposed in order to face said stimuable phosphor screen.

18.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 10, and an imaging device disposed in order to face said stimuable phosphor screen.

19.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 11, and an imaging device disposed in order to face said stimuable phosphor screen.

20.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 12, and an imaging device disposed in order to face said stimuable phosphor screen.

21.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 13, and an imaging device disposed in order to face said stimuable phosphor screen.

22.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 14, and an imaging device disposed in order to face said stimuable phosphor screen.

23.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 15, and an imaging device disposed in order to face said stimuable phosphor screen.

24.(original) A radiation image sensor comprising a stimuable phosphor screen according to claim 16, and an imaging device disposed in order to face said stimuable phosphor screen.

25.(original) A radiation image sensor according to claim 17,
wherein said
imaging device is a CCD.

26.(original) A radiation image sensor according to claim 18,
wherein said
imaging device is a CCD.

27.(original) A radiation image sensor according to claim 19,
wherein said
imaging device is a CCD.

28.(original) A radiation image sensor according to claim 20,
wherein said
imaging device is a CCD.

29.(original) A radiation image sensor according to claim 21,
wherein said
imaging device is a CCD.

30.(original) A radiation image sensor according to claim 22,
wherein said
imaging device is a CCD.

31.(original) A radiation image sensor according to claim 23,
wherein said
imaging device is a CCD.

32.(original) A radiation image sensor according to claim 24,
wherein said
imaging device is a CCD.

33.(currently amended) A method of preparing a stimuable
phosphor screen or panel according to claim 1, said method
comprising the steps of:

- forming a stimuable phosphor layer on a radiation-transparent substrate;
- forming a first transparent organic film covering said ~~needle-shaped~~ stimuable phosphor layer; and
- forming a second transparent film formed on said first transparent organic film, wherein said second transparent film is a polymeric film containing polymers selected from the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers; and wherein at least one of said first transparent organic film and said second transparent organic film is a poly-paraxylylene film.

34.(currently amended) A method of preparing a stimuable phosphor screen or panel according to claim 2, said method comprising the steps of:

- forming a stimuable phosphor layer on a radiation-transparent substrate;
- forming a first transparent organic film covering said ~~needle-shaped~~ stimuable phosphor layer; and
- forming a second transparent film formed on said first transparent organic film, wherein said second transparent film is a polymeric film containing polymers selected from

the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers; and wherein said organic film is a poly-paraxylylene film.

35.(currently amended) A method of preparing a stimuable phosphor screen or panel according to claim 3, said method comprising the steps of:

- forming a stimuable phosphor layer on a radiation-transparent substrate;
- forming a first transparent organic film covering said ~~needle-shaped~~ stimuable phosphor layer; and
- forming a second transparent film formed on said first transparent organic film, wherein said second transparent film is a polymeric film containing polymers selected from the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers; and wherein said organic film is a poly-paraxylylene film.

36.(currently amended) A method of preparing a stimuable phosphor screen or panel according to claim 4, said method

comprising the steps of:

- forming a stimuable phosphor layer on a radiation-transparent substrate;
- forming a first transparent organic film covering said needle-shaped stimuable phosphor layer; and
- forming a second transparent film formed on said first transparent organic film, wherein said second transparent film is a polymeric film containing polymers selected from the group consisting of silazane and siloxazane type polymers, mixtures thereof and mixtures of said silazane or siloxazane type polymers with compatible film-forming polymers; and wherein at least one of said first transparent organic film and said second transparent organic film is a poly-paraxylylene film.

37.(original) A method according to claim 33, said method comprising an additional step of forming a third transparent film layer, wherein said third transparent film layer is a polymeric film covering said second transparent film layer.

38.(original) A method according to claim 34, said method comprising an additional step of forming a third transparent film layer, wherein said third transparent film layer is a polymeric film covering said second transparent film layer.

39.(original) A method according to claim 35, said method comprising an additional step of forming a third transparent film layer, wherein said third transparent film layer is a polymeric film covering said second transparent film layer.

40.(original) A method according to claim 36, said method comprising an additional step of forming a third transparent film layer, wherein said third transparent film layer is a polymeric film covering said second transparent film layer.

41.(currently amended) A method according to claim 37, wherein said third transparent film layer is a polymeric film layer containing polymers selected from the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers.

42.(currently amended) A method according to claim 38, wherein said third transparent film layer is a polymeric film layer containing polymers selected from the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers.

43.(currently amended) A method according to claim 39, wherein said third transparent film layer is a polymeric film layer containing polymers selected from the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers.

44.(currently amended) A method according to claim 40, wherein said third transparent film layer is a polymeric film layer containing polymers selected from the group consisting of silazane and siloxazane ~~type~~ polymers, mixtures thereof and mixtures of said silazane or siloxazane ~~type~~ polymers with compatible film-forming polymers.

45.(new) A stimuable phosphor screen comprising

- a radiation-transparent substrate;
- a stimuable phosphor layer formed on said substrate;
- a first transparent organic film covering said stimuable phosphor layer; and
- a second transparent film formed on said first transparent organic film,

characterized in that said second transparent film is a polymeric film containing polymers siloxazane polymers.

46.(new) The stimuable phosphor screen of claim 45 wherein
said second transparent film further comprises silazane.